

CLAIMS

I claim:

1. A method of improving the sexual performance in a male subject, comprising:

percutaneously delivering a pharmaceutically effective amount of a steroid in the
5 testosterone synthetic pathway to the subject via a pharmaceutical composition comprising
the steroid, at least one of a C1-C4 alcohol, and a penetration enhancer.

2. The method in claim 1 wherein the penetration enhancer comprises at least one of
a C8-C22 fatty acid.

3. The method in claim 1 wherein the fatty acid comprises an alkyl chain length of at
10 least 12 carbon atoms.

4. The method in claim 1 wherein the lower alcohol comprises at least one of ethanol,
2-propanol, n-propanol, and mixtures thereof.

5. The method in claim 1 wherein the steroid is testosterone and the enhancer is
isopropyl myristate.

- 15 6. The method of claim 5 wherein the composition comprises about 1.0 g w/w of
testosterone.

7. The method of claim 5 wherein the enhancer comprises about 0.5 g w/w of
isopropyl myristate.

8. The method of claim 5 wherein the thickener is CARBOPOL.

- 20 9. The method of claim 1 where the steroid comprises about 0.5 g to about 5.0 g
testosterone, the thickener comprises about 0.10 g to about 2 g of CARBOPOL, the
enhancer comprises about 0.1 g to about 2 g of isopropyl myristate, the C1-C4 alcohol
comprises about 40.0 g to about 90 g of ethanol.

10. The method in claim 1 wherein the men are hypogonadal.

11. The method in claim 10 wherein the men suffer from primary hypogonadism.

12. The method in claim 1 wherein the delivering occurs daily.

13. The method in claim 12 wherein the delivery comprises administering the composition to the right/left upper arms/shoulders and to the right/left sides of the abdomen once per day on alternate days.

14. The method in claim 1 wherein the pharmaceutically effective amount of steroid comprises 75 mg of testosterone per day.

15. The method in claim 14 wherein the men achieve hormonal steady state levels of testosterone.

16. The method in claim 1 wherein the improving sexual performance comprises treating impotence in the men.

17. A method of increasing the libido of men comprising:

delivering a pharmaceutically effective amount of a steroid in the testosterone synthetic pathway to the men percutaneously in a composition comprised of a C1-C4 alcohol, a penetration enhancer, a thickener, testosterone, and water.

18. The method in claim 17 wherein the penetration enhancer comprises at least one of a C8-C22 fatty acid.

19. The method in claim 17 wherein the fatty acid comprises an alkyl chain length of at least 12 carbon atoms.

20. The method in claim 17 wherein the lower alcohol comprises at least one of ethanol, 2-propanol, n-propanol, and mixtures thereof.

21. The method in claim 17 wherein the steroid is testosterone and the enhancer is isopropyl myristate.

22. The method of claim 21 wherein the composition comprises about 1.0 g w/w of testosterone.

23. The method of claim 21 wherein the enhancer comprises about 0.5 g w/w of isopropyl myristate.

5 24. The method of claim 21 wherein the thickener is CARBOPOL.

25. The method of claim 17 where the steroid comprises about 0.5 g to about 5.0 g testosterone, the thickener comprises about 0.10 g to about 2 g of CARBOPOL, the enhancer comprises about 0.1 g to about 2 g of isopropyl myristate, the C1-C4 alcohol comprises about 40.0 g to about 90 g of ethanol.

10 26. The method in claim 17 wherein the men are hypogonadal.

27. The method in claim 17 wherein the men suffer from primary hypogonadism.

28. The method in claim 17 wherein the delivering occurs daily.

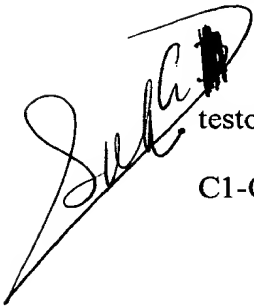
15 29. The method in claim 28 wherein the delivery comprises administering the composition to the right/left upper arms/shoulders and to the right/left sides of the abdomen once per day on alternate days.

30. The method in claim 17 wherein the pharmaceutically effective amount of a steroid in the testosterone synthetic pathway comprises 75 mg of testosterone per day.

31. The method in claim 17 wherein the men achieve hormonal steady state levels of testosterone.

20 32. A method for improving the efficacy of a pharmaceutical useful for treating erectile dysfunction in a male subject, comprising:

percutaneously delivering a pharmaceutically effective amount of a steroid in the testosterone synthetic pathway to the subject in a composition comprising at least one of a C1-C4 alcohol, the steroid, and a penetration enhancer; and



administering the pharmaceutical to the subject.

33. The method in claim 32 wherein the subject is eugonadal.

34. The method of claim 32 wherein the pharmaceutical is a phosphodiesterase type 5 inhibitor.

35. The method in claim 32 wherein the pharmaceutical is at least one of sildenafil citrate, pentoxifylline, yohimbine, apomorphine, alprostadil, papavaerine, phentolamine, and combinations, salts, derivatives and enantiomers of thereof

36. The method in claim 32 wherein the pharmaceuticals are selected from the group consisting of VIAGRA, UPRIMA, TRENTAL or ACTIBINE.

37. The method in claim 32 wherein the penetration enhancer comprises at least one of a C8-C22 fatty acid.

38. The method in claim 32 wherein the fatty acid comprises an alkyl chain length of at least 12 carbon atoms.

39. The method in claim 32 wherein the lower alcohol comprises at least one of ethanol, 2-propanol, n-propanol, and mixtures thereof.

40. The method in claim 32 wherein the steroid is testosterone and the enhancer is isopropyl myristate.

41. The method of claim 38 wherein the composition comprises about 1.0 g w/w of testosterone.

42. The method of claim 38 wherein the enhancer comprises about 0.5 g w/w of isopropyl myristate.

43. The method of claim 38 wherein the thickener is CARBOPOL.

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~~42.~~ The method of claim 32 where the steroid comprises about 0.5 g to about 5.0 g testosterone, the thickener comprises about 0.10 g to about 2 g of CARBOPOL, the enhancer comprises about 0.1 g to about 2 g of isopropyl myristate, the C1-C4 alcohol comprises about 40.0 g to about 90 g of ethanol.

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~~43.~~ The method in claim 32 wherein the men are hypogonadal.

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~~44.~~ The method in claim 32 wherein the men suffer from primary hypogonadism.

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~~45.~~ The method in claim 32 wherein the delivering occurs daily.

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~~46.~~ The method in claim 32 wherein the delivery comprises administering the composition to the right/left upper arms/shoulders and to the right/left sides of the abdomen once per day on alternate days.

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~~47.~~ The method in claim 32 wherein the pharmaceutically effective amount steroid comprises 75 mg of testosterone per day.

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~~48.~~ The method in claim 32 wherein the men achieve hormonal steady state levels of testosterone.

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~~49.~~ A kit comprised of a pharmaceutical useful for treating erectile dysfunction in a man and a transdermal testosterone gel.

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~~50.~~ The kit of claim ⁵¹~~49~~ wherein the pharmaceutical is a phosphodiesterase type 5 inhibitor.

20 ⁵³
~~51.~~ The kit in claim ⁵¹~~49~~ wherein the pharmaceutical is at least one of sildenafil citrate, pentoxifylline, yohimbine, apomorphine, alprostadil, papaverine, phentolamine, and combinations, salts, derivatives and enantiomers of thereof

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~~52.~~ The kit in claim ⁵¹~~49~~ wherein the pharmaceuticals are selected from the group consisting of VIAGRA, UPRIMA, TRENTAL or ACTIBINE.

~~55~~
~~53.~~

The kit of claim ~~49~~⁵¹ wherein the testosterone gel comprises about 0.5 g to about 5.0 g testosterone, a thickener, an enhancer, and a C1-C4 alcohol.

~~56~~
~~54.~~

The kit of claim ~~53~~⁵⁵ wherein the thickener comprises about 0.10 g to about 2 g of CARBOPOL, the enhancer comprises about 0.1 g to about 2 g of isopropyl myristate, the C1-C4 alcohol comprises about 40.0 g to about 90 g of ethanol.

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add A4
add B15

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B1